

ABSTRACT OF THE DISCLOSURE

A defective pixel detection and correction mechanism for use in an image sensor integrated circuit determines whether a current pixel is a defective pixel in a consistent manner from frame to frame. The defective pixel detection and correction mechanism also replaces defective pixels with stable replacement values. The defective pixel detection and correction mechanism has a defective pixel detection mechanism that employs a look-up table with defective pixel locations for providing a non-varying determination of whether a pixel is defective or non-defective. The defective pixel detection and correction mechanism also has a defective pixel correction mechanism that employs a consistent replacement choice facility to provide a previous pixel value in the same frame, on the same row, and a predetermined number of pixels from the current pixel location as a replacement value and a replacement unit (e.g., multiplexer) for replacing the defective pixel value with the replacement value.